

19.40 Critical areas

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PURPOSES AND GENERAL PROVISIONS

19.40.010 User guide.

This chapter establishes regulations pertaining to the development within or adjacent to *critical areas*. Many areas of Burien have been or may become classified as *critical areas* by the City or other public agencies. [Ord. 376 § 1, 2003]

19.40.020 Purposes and Goals.

The City finds that *critical areas* provide a variety of valuable and beneficial biological and physical functions that benefit the City and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and value of *critical areas* include, but are not limited to, water quality protection and *enhancement*, fish and *wildlife habitat*, food chain support, flood storage, conveyance and attenuation of storm runoff, ground water recharge and discharge, wave attenuation, aesthetic value protection, and recreation. Hazards include *landslides*, flooding and excessive *erosion*. This chapter is to be administered with flexibility and attention to *site-specific* characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner *reasonable use* of the property.

1. Purposes. The purposes of this chapter are to:

- A. Implement the goals, policies, guidelines and requirements of the Washington State Environmental Policy Act, Chapter 43.21C RCW, Growth Management Act, Chapter 36.70A RCW and the City of Burien comprehensive plan which call for protection of the natural environment and the public health, safety and welfare, and allowing for appropriate urban development within the region's urban growth area.
- B. Regulate the use of *critical areas* in accordance with the Growth Management Act and through the application of *best available science*, as determined according to WAC 365-195-900 through 365-195-925, as amended, and in consultation with state and federal agencies and other qualified professionals.

2. Goals. By regulating development and *alteration* of *critical areas* and their *buffers*, this chapter seeks to:

- A. Preserve and enhance the ecological value of *critical areas* to **maintain the functional integrity of the natural environment.**
- B. Protect public health, safety and welfare by **minimizing adverse impacts and risks** associated with development in *critical areas*.
- C. **Preserve the quality of life** in Burien.
- D. **Minimize public and private expenditures** to correct future misuses of *critical areas*.

E. Provide City officials with **sufficient information, direction and authority** to identify and if necessary, regulate development of *critical areas*; mitigate impacts on *critical areas* and enforce *critical area* regulations and permit conditions.

F. **Encourage flexibility and creativity** in the development of property containing or adjacent to *critical areas*, to meet the requirements and goals of this chapter while **preserving property rights**; and

G. **Educate** the community about the hazards, risks, functions, and value of Burien's *critical areas* and the responsibility of the City to protect and preserve the natural environment for future generations. [Ord. 376 § 1, 2003]

19.40.030 Relationship to other regulations.

1. Greater restrictions. When any provision of this code conflicts with this chapter or when the provisions of this chapter are in conflict, the provision that provides more protection to *critical areas* shall apply, unless specifically provided otherwise in this chapter or unless such provision conflicts with federal or state laws or regulations.
2. Multiple buffers. When more than one *critical area* affects a *site* and multiple *buffers* are required, all required *buffers* must be provided, unless specifically provided otherwise in this chapter. Where *buffers* overlap, the most restrictive *buffer* applies.
3. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required. The *applicant* is responsible for complying with these requirements, apart from the process established in this chapter. [Ord. 376 § 1, 2003]

19.40.040 Applicability.

1. Compliance required. *Alteration*, development, *use*, and/or activities proposed within or adjacent to *critical areas* and their required *buffers* shall comply with the provisions of this chapter. Critical areas and their required *buffers* shall not be altered except as allowed by this chapter.
2. Identification and classification of critical areas. The *Director* shall identify and classify *critical areas* as follows:
 - A. Critical Areas Map. The locations of many *critical areas* in Burien are displayed on the City of Burien's Critical Areas Map, which is hereby adopted by reference. This map is used to alert the public of the potential location of *critical areas* in Burien. As new environmental information related to *critical areas* becomes available, the *Director* is hereby designated to periodically make such changes as necessary to the Critical Areas Map.
 - B. Actual site conditions. Regardless of whether a *critical area* is shown on the *critical areas* map, the actual presence or absence of the features defined in this code as *critical areas* shall govern. The *Director* may require the *applicant* to submit technical information to indicate whether *critical areas* actually exist on or adjacent to the *applicant's site*, based on the definitions of *critical areas* in this code.
3. Adjacency. For the purposes of this Chapter, land is "adjacent" to a *critical area* if it is:
 - A. Land that contains the required *critical area buffer* width and *building setback*;

- B. Land within one hundred (100) feet upland from a *stream, wetland* or lake;
- C. Land within 800 feet of a bald eagle nest;
- D. Land within 200 feet from a designated *critical aquifer recharge area*; or
- E. Land within the *floodway* or *floodplain*. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.050 Protection of critical areas.

Any action taken pursuant to this Chapter shall result in equivalent or greater functions and value of the *critical areas* associated with the proposed action, as determined by the *best available science*. All actions and developments shall be designed and constructed to avoid, minimize and restore all adverse impacts. *Applicants* must first demonstrate an inability to avoid or reduce impacts, before *restoration* and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or value of *critical areas*. [Ord. 376 § 1, 2003]

19.40.060 Best available science.

1. Criteria for best available science. The *best available science* is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific professional or team of qualified scientific professionals, that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925, as amended.
2. Protection for functions and value and anadromous fish. Critical area studies and decisions to alter *critical areas* shall rely on the *best available science* to protect the functions and value of *critical areas* and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat, such as salmon and bull trout. [Ord. 376 § 1, 2003]

19.40.070 Exemptions and exceptions.

1. Avoid or limit impacts. All exempt activities shall use city-approved *best management practices* and other reasonable methods to reasonably minimize impact to *critical areas* and their required *buffers*. To be exempt from this Chapter does not give permission to degrade a *critical area* or ignore risk from natural hazards. The *Director* may require submittal of a critical area study pursuant to BMC 19.40.110 through BMC 19.40.130 if needed to assess public safety risks associated with the proposal. Restoration of non-exempted *alterations* or damage to a *critical area* or its *buffer* may be required.
2. Exempt activities. The following shall be exempt from the provisions of this Chapter; however, the activities listed below may not be exempted from other city, state or federal permit requirements or regulations:
 - A. Emergencies. *Alterations* in response to emergencies which pose an immediate threat to the public health, safety and welfare or which pose an imminent risk of damage to property. Any *alteration* undertaken as an emergency shall be reported within one (1) business day to the Department of Community Development. The *Director* shall confirm that an emergency exists and determine what, if any, *mitigation* and conditions shall be required to protect the health, safety, welfare and environment and to repair any damage to the *critical area* and its required *buffers*. Emergency work must be approved by the City. If the *Director* determines

that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions of BMC 8.45 shall apply.

B. Normal and routine operation, maintenance, remodeling, repair and revegetation of existing public facilities, parks and open spaces as long as any such activities do not involve the expansion of improvements into previously unimproved areas.

C. Normal and routine operation, maintenance, remodeling, replacement and repair of existing public *streets* and city-approved private roads. Such activities shall not involve the expansion of roadways or related improvements into previously unimproved portions of *rights-of-way* or vehicular access easements or tracts.

D. Except in *streams* and *wetlands* or their *buffers*, normal and routine operation, maintenance, remodeling, and repair of existing public and quasi-public utilities (including water, sanitary sewer, storm drainage, electric, natural gas, cable communications, telephone utility and related activities), including:

- i. Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less, only when required by a local governmental agency which approves the new location of the facilities;
- ii. Replacement, modification, installation or construction in an improved city road *right-of-way* or city authorized private road of all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less;
- iii. Relocation of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by a local governmental agency which approves the new location of the facilities; and
- iv. Replacement, modification, installation or construction of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public *right-of-way* or city authorized private roadway;

E. Normal and routine maintenance, repair, renovation or structural alteration of public and private *structures* not listed in this section, in existence on January 14, 2003.

F. New *accessory structures* and additions to *structures* that do not exceed a cumulative *impervious surface* addition after January 14, 2003 of 1,000 square feet or 7% of *lot area*, whichever is greater; provided that:

- i. Construction is not within a *stream*, *wetland* or lake or in their required *buffers*; and
- ii. The proposal does not increase non-conformance to *critical area* standards related to *streams*, *wetlands* or lakes.

G. Public and private pedestrian trails, except in *streams*, *wetlands*, fish and wildlife habitat conservation areas, or their *buffers*, subject to the following:

i. *Critical area* and/or *buffer* widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and

ii. Trails proposed to be located in *landslide* or *erosion hazard areas* shall be constructed in a manner that does not increase the risk of *landslide* or *erosion* and in accordance with an approved geotechnical report;

H. Forest practices. *Forest practices* regulated and conducted in accordance with the provisions of Chapter 76.09 RCW and *forest practices* regulations, Title 222 WAC, and those that are exempt from city's jurisdiction, provided that *forest practice* conversions are not exempt.

I. Minor site investigative work. Work necessary for permit submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads, significant amounts of excavation or removal of *significant trees*. In every case, impacts to the *critical area* shall be minimized and disturbed areas shall be immediately restored.

J. Slope exemptions: The following *slopes* are exempt, unless the *slope* is part of another *critical area* or required *buffer*.

i. *Slopes* resulting from *street*, *alley*, sidewalk and other typical *rights-of-way* improvements, including rockeries or retaining walls. This exemption shall not extend beyond the cut or fill created by the *street*, *alley*, sidewalk or other *rights-of-way* improvement.

ii. *Slopes* with a vertical elevation change of up to ten feet (10) and not part of a larger steep-*slope* system.

iii. *Slopes* which have been created through previous verifiable, legal *grading* activities, may be exempted by the *Director* based on a geotechnical report demonstrating that no adverse impact will result from the exemption.

K. Stabilization of Landslide-hazard Area. Certain *landslide hazard areas* may be exempt if the *Director* determines based on geotechnical expertise, that application of the regulations would prevent necessary stabilization of a *landslide-prone* area.

L. Non-regulated activities in the *critical aquifer recharge areas*.

3. Public agency and utility exception.

A. If the application of this chapter would prohibit a development proposal by a *public agency* or *public utility*, the agency or utility may apply for a Public Agency and Utility Exception. All requirements of this chapter apply, except as specifically waived as part of the decision on the exception.

B. Exception request and review process. An application for a public agency and utility exception shall be made to the city and shall include a *critical area* study, including mitigation plan, if necessary; other related project documents, and any applicable environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW). The application shall be processed using the Type 1 review process pursuant to BMC 19.65.

C. Public agency and utility exception review criteria. The *Director's* decision shall be based on the following criteria:

- i. There is no other practical or feasible alternative to the proposed development with less impact on the *critical area*; and
- ii. The proposal minimizes the impact on *critical areas*; and
- iii. The application of this chapter would unreasonably restrict the ability to provide utility services to the public, and
- iv. The proposal meets the decision criteria in BMC 19.40.100.

4. Reasonable use exception.

A. If the application of this chapter would deny all *reasonable use* of the property, the *applicant* may apply for a Reasonable Use Exception. All requirements of this chapter apply, except as specifically waived as part of the decision on the exception.

B. Limitations. Reasonable use exceptions are not authorized for changes in density limitations, permitted *uses* or activities in *critical areas* or their required *buffers*, expanding a use otherwise prohibited, and shall not be used to achieve the maximum density allowed without the existence of *critical areas*.

C. Exception request and review process. An application for a reasonable use exception shall be made to the city and shall include a *critical area* study, including mitigation plan, if necessary; and any other related project documents, such as special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW). The application shall be processed using the Type 1 review process pursuant to BMC 19.65.

D. Reasonable use exception review criteria. The *Director's* decision shall be based on the following criteria:

- i. The application of this chapter would deny all *reasonable use* of the property;
- ii. There is no other *reasonable use* with less impact on the *critical area*;
- iii. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal *site* and is consistent with the general purposes of this chapter and the public interest; and
- iv. Any *alterations* permitted to the *critical area* shall be the minimum necessary to allow for *reasonable use* of the property.
- v. The proposal meets the decision criteria in BMC 19.40.100. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.080 Reserved. [Ord. 394 § 1, 2003]

CRITICAL AREA REVIEW

19.40.090 Critical area review.

1. Required review. *Alteration*, construction, development or activity within a *critical area* (except a *seismic hazard*) or its required *buffer* must be approved through a critical area review, unless exempted pursuant to BMC 19.40.070 or BMC 19.40.320. Prior to submitting an application for critical area review, the *applicant* shall schedule and attend a City of Burien pre-application meeting to obtain information relating to overall project feasibility, scope of critical area studies, standards and possible *mitigation* required for *alterations* on or near *critical areas*.

2. As part of its review of a critical area review, the City shall:

- A. Verify the information submitted by the *applicant*;
- B. Determine whether any *critical area* exists on the property and confirm its nature and type;
- C. Evaluate the critical area study;
- D. Determine whether the development proposal conforms to the purposes and performance standards of this Chapter, including the criteria in BMC 19.40.100;
- E. Determine if the proposed project adequately addresses impacts on the *functions or value* of *critical areas* and whether such impacts are necessary and unavoidable;
- F. Determine if the *mitigation* and *monitoring* plans and bonding measures proposed by the *applicant* are sufficient to protect the *functions and value* of the *critical area*, and public health, safety and welfare concerns, consistent with the goals, purposes, objectives and requirements of this chapter.

3. Submittal requirements. Applications for critical area review shall be submitted with all of the following information:

- A. A written critical area study (BMC 19.40.120) that adequately evaluates the proposal, all probable impacts and risks related to the *critical area* and recommends appropriate *mitigation* measures to comply with the provisions of this chapter.
- B. In addition to indicating the location of the proposal, the site and development plans shall include:
 - i. The accurate location of those *critical areas* and their required *buffers* that could be affected by the proposal.
 - ii. The approximate location of all mapped or identifiable *critical areas* and their *buffers* that are within the distances identified in BMC 19.40.040.3.
 - iii. Accurate topography drawn to scale with a minimum 2-foot contour interval.
- C. Applicable filing fees.
- D. If necessary to insure compliance with this chapter, the *Director* may require additional information from the *applicant*, separate from the critical area study. [Ord. 376 § 1, 2003]

19.40.100 Review criteria.

1. Any *alteration* to a *critical area* or its required *buffer*, unless otherwise provided for in this Chapter, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:

- A. The proposal limits the impact on *critical areas*;
- B. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the *site*;
- C. The proposal is consistent with the general purposes of this Chapter and the public interest;
- D. Any *alterations* permitted to the *critical area* or its required *buffer* are mitigated in accordance with the critical area study; and
- E. The proposal protects the *critical area functions and value* consistent with the *best available science*.

2. The city may condition the proposed activity as necessary to mitigate impacts to *critical areas* and to conform to the standards required by this Chapter. [Ord. 376 § 1, 2003]

CRITICAL AREA STUDY

19.40.110 Critical area study – waiver.

The *Director* shall waive the requirement for a critical area study if:

- 1. There will be no *alteration* of the *critical area* or *buffer*; and
- 2. The development proposal will not impact the *critical area* in a manner contrary to the purpose, intent, and requirements of this Chapter; and
- 3. The proposal is consistent with other City of Burien applicable regulations and standards. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.120 Critical area study requirements.

- 1. General. The critical area study shall be funded by the *applicant* and shall be prepared in accordance with procedures established by the *Director*. If appropriate professional expertise does not exist on City staff, the *Director* may retain experts at the *applicant's* expense to review critical area studies submitted by the *applicant*. Expense to the *applicant* shall be determined at the pre-application meeting.
- 2. Prepared by qualified professional. A required critical area study shall be prepared by a person with experience and training in the scientific discipline appropriate for the relevant *critical area* subject in accordance with WAC 365-195-905(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field, and two years of related work experience.

- A. A qualified professional for Fish and Wildlife Habitat Conservation Areas or *wetlands* must have a degree in biology and professional experience related to the subject *species*.
 - B. A qualified professional for a geological hazard must be a professional engineer or *geologist*, licensed in the state of Washington.
 - C. A qualified professional for *critical aquifer recharge areas* means a hydrogeologist, *geologist*, engineer, or other scientist with experience in preparing hydrogeologic assessments.
3. Incorporating best available science. The critical area study shall use scientifically valid methods and studies in the analysis of *critical area* data and field reconnaissance and reference the source of science used. The critical area study shall evaluate the proposal and all probable impacts to *critical areas* in accordance with the provisions of this Chapter.
4. Minimum study contents. The critical area study shall contain, at a minimum, the following information, as applicable:
- A. The name and contact information of the *applicant*, a description of the proposal, and identification of the permit requested.
 - B. A copy of the site plan for the development proposal showing:
 - i. Identified *critical areas*, *buffers*, and the development proposal with dimensions;
 - ii. Limits of any areas to be cleared; and
 - iii. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage *alterations*;
 - C. The dates, names, and qualifications of the persons preparing the study and documentation of any fieldwork performed on the *site*;
 - D. Identification and characterization of all *critical areas*, water bodies, and *buffers* adjacent to the proposed project area or potentially impacted by the proposed project;
 - E. A statement specifying the accuracy of the study, and assumptions used in the study;
 - F. Determination of the degree of hazard and risk from the proposal both on the *site* and on surrounding properties;
 - G. An assessment of the probable cumulative impacts to *critical areas*, their *buffers* and other properties resulting from the proposal;
 - H. A description of reasonable efforts made to apply *mitigation* sequencing to avoid, minimize, and mitigate impacts to *critical areas*;
 - I. Plans for adequate *mitigation* to offset any impacts;
 - J. Recommendations for maintenance, short-term and long-term *monitoring*, contingency plans and bonding measures; and

K. Any other technical information required by the *Director* to assist in determining compliance with this Chapter. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.130 Critical area study – modifications to requirements.

1. Limitations to study area. The *Director* may limit the required geographic area of the critical area study as appropriate if:

A. The *applicant*, with assistance from the city, cannot obtain permission to access properties adjacent to the project area; or

B. The proposed activity will affect only a limited part of the *site*.

2. Modifications to required contents of study. The *Director* may allow modifications to the required contents of the study where, in the judgment of a qualified professional, more or less information is required to adequately address the potential *critical area* impacts and required *mitigation*. [Ord. 376 § 1, 2003]

CRITICAL AREA DETERMINATION

19.40.140 Determination.

1. General. The *Director* shall issue a written critical area determination as to whether the proposed activity and *mitigation*, if any, is consistent with the provisions of this Chapter. The *Director's* determination shall be based on the criteria of BMC 19.40.100. The *Director* may require increased *buffer* widths, increased *setbacks* or other protective measures not required in this chapter if required in the critical area study.

2. Review process and timing. The determination for proposed development on an undeveloped *lot* in a *landslide hazard area* shall be processed using the Type I review process and timing described in BMC 19.65. Determinations for all other types of proposals shall be processed as an administrative decision. The City's goal is to issue the administrative decision within 60 days of submittal of a complete application containing the materials required in BMC 19.40.090.3.

3. Favorable determination. If the *Director* determines that the proposed activity meets the criteria in BMC 19.40.100 and complies with the applicable provisions of this Chapter, the *Director* shall prepare a written notice of determination and identify any required conditions of approval. If a Type I review is required, the critical area notice of determination shall be combined with the Type I review notice of decision. The notice of determination and conditions of approval shall be included in the project file and be considered in future phases of the city's review of the proposed activity in accordance with any other applicable codes or regulations.

Any conditions of approval included in a notice of determination shall be attached to the underlying permit or approval. Any subsequent changes to the conditions of approval shall void the previous determination pending re-review of the proposal and conditions of approval by the *Director*.

A favorable determination should not be construed as endorsement or approval of any underlying permit or approval.

4. Unfavorable determination. If the *Director* determines that a proposed activity does not adequately mitigate its impacts on the *critical areas* and/or does not comply with the criteria in

BMC 19.40.100 and the provisions of this Chapter, the *Director* shall prepare written notice of the determination that includes findings of noncompliance. If a Type I review is required, the critical area notice of determination shall be combined with the Type I review notice of decision.

No proposed activity or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the *critical areas* and/or does not comply with the provisions of this Chapter. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.150 Appeal of determination.

A critical area determination issued using the Type 1 review process may be appealed using the appeal procedures for a Type 1 decision (BMC 19.65). A critical area determination issued as an administrative decision may be appealed according to, and as part of the appeal procedure for the underlying permit or approval involved. [Ord. 376 § 1, 2003]

GENERAL CRITICAL AREA DEVELOPMENT STANDARDS

19.40.160 Construction requirements.

1. The *Director* may require that the *applicant* retain the expert(s) that prepared the critical area study, or another expert approved by the City, to monitor construction for compliance with the professional's recommendations and related requirements imposed by the City. The *Director* may require that the expert submit field reports to the City on a regular basis during construction, a final report and following construction if needed to ensure compliance with this code and the recommendations of the critical area study.

2. If required by the critical area study, City of Burien *Construction Code*, or King County Surface Water Design Manual, the *applicant* shall submit a temporary erosion and sedimentation control plan and/or a permanent and complete stormwater control plan for the proposal. The plan shall include but not be limited to the following items as appropriate: curbs, gutters, inlets, catch basins, tightlines, retention and detention facilities, stabilized outfalls, and subterranean water. Maximum flows of runoff from the property shall not be increased by the construction activity or resultant improvements. The *Director* shall provide specific requirements for such plans.

3. If required by the critical area study, City of Burien *Construction Code*, or King County Surface Water Design Manual, the *Director* may restrict construction to a construction season. If a construction season is established, it may be subsequently modified as necessary by the *Director*.

4. If required by the critical area study or City of Burien *Construction Code*, the *Director* may require the use of alternate foundation systems that limit the amount of excavation, for example, pilings, caissons, footings with grade beams, or other appropriate systems. The *Director* may limit or prohibit the use of conventional spread footings at *building* perimeters. The *Director* may require excavations to be dug by hand or using hand-held machinery.

5. All subdivisions, short subdivisions or binding site plans shall comply with the following additional requirements:

A. Except as provided in this section, existing vegetation shall be retained on all *lots* until building permits are approved for development on individual *lots*; and

B. If any vegetation on the *lots* is damaged or removed during construction of the subdivision infrastructure, the *applicant* shall be required to submit a *restoration* plan to the

Director for review and approval. Following approval, the *applicant* shall be required to implement the plan;

6. Indemnification. An indemnification or hold harmless agreement shall be required for all *clearing, grading* or construction on *lots* containing *critical areas*, except for *non-regulated uses* in *critical aquifer recharge areas*. The form of the agreement shall be approved by the City Attorney and executed prior to issuance of any permits for development of the *site*. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.170 Mitigation, maintenance, and monitoring.

1. The *Director* may require the *applicant* to provide, at the *applicant's* expense, *mitigation*, maintenance and *monitoring* measures to protect *critical areas* and *buffers*. A written report describing the results of any *mitigation*, maintenance or *monitoring* measures shall be submitted to the *Director* for review and further action, if needed.

2. Where *monitoring* reveals a significant deviation from predicted impacts or a failure of *mitigation* or maintenance measures, the *applicant* shall be responsible for appropriate corrective action which, when approved, shall be subject to further *monitoring*. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.180 Bonds.

The *Director* may require a bond or other security in a form and amount deemed acceptable by the *Director* to ensure compliance with any aspect of this chapter or any decision or determination made under this chapter. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.190 Vegetation management plan.

1. For all proposals where preservation of existing vegetation is required by this chapter, a vegetation management plan shall be submitted and approved prior to issuance of the permit or other request for permission to proceed with an *alteration*.

2. The vegetation management plan shall incorporate all City requirements relating to protection, maintenance and planting of vegetation and shall identify the proposed *clearing* limits for the project and any areas where vegetation in a *critical area* or its *buffer* is proposed to be disturbed.

3. *Clearing* limits as shown on the plan shall be marked in the field in a prominent and durable manner. Proposed methods of field marking shall be reviewed and approved by the *Director* prior to any *site alteration*. Field marking shall remain in place until the certificate of occupancy or final project approval is granted.

4. The vegetation management plan may be incorporated into a temporary erosion and sediment control plan or landscaping plan where either of these plans is required by other laws or regulations.

5. Vegetation within *critical areas* and their *buffers* may be trimmed, pruned or removed only upon prior written approval by the *Director*. A report by a qualified professional or certified arborist may be required to address alternatives, to ensure that the proposed activity will not be detrimental to surrounding properties and to the *functions and values* of the associated *critical area*.

6. Where *alteration* of the *critical area* or *buffer* has occurred during construction, revegetation with *native vegetation* will be required unless the *Director* approves a substitute vegetation with the same or better functions than the original *buffer* area. If the *alteration* was unauthorized by the City, the *Director* may also impose penalties pursuant to BMC 8.45. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.200 Critical area markers and signs.

The section below does not pertain to *critical aquifer recharge areas* or *seismic hazard areas*.

1. Boundary delineation and construction fencing. The outer edge of any required *critical area buffer*, tract or protective easement shall be clearly staked using permanent survey markers installed by a licensed surveyor. The survey markers and a temporary construction *fence* shall be installed at *applicant* expense and accepted by the *Director* prior to issuance of any permits for *site clearing* or construction, or, if permits are not required, prior to any *alteration* of the *site*. The temporary construction *fence* shall be a sturdy wire, chain link or wood *fence* between 3 feet and 6 feet high as required by the *Director*. The *Director* may require signs to be installed on the *fence* indicating that no disturbance of the *critical area* and its *buffer* is allowed.

2. Permanent barrier or fencing. The *Director* may require installation of a permanent barrier such as a *fence* or berm, if needed to protect the *critical area* and/or its *buffer* from damage or encroachment after construction. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.210 Notice on title.

1. The owner of any property containing *critical areas* or *buffers* on which a critical area review application is submitted, except a public *right-of-way*, shall record a notice approved by the *Director* with the King County Records and Elections Division. The notice shall inform the public of the presence of *critical areas* or *buffers* on the *site*, of the application of this chapter to the property, of the requirement for engineered structure design (if applicable), and that limitations on actions in or affecting such *critical areas* or *buffers* may exist. The notice shall run with the land.

2. The *applicant* shall submit proof that the notice has been filed for public record before the *Director* shall approve any permits or *alteration* for the *site*, in the case of subdivisions, short subdivisions and binding site plans, at or before recording. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.220 Permanent protection of critical areas and buffers.

As a condition of approval of a critical area review, the City shall require that *critical areas* and their *buffers*, except for *critical aquifer recharge areas* and *seismic hazard areas*, shall be permanently protected from *alteration* by tracts or easements. A property owner may also voluntarily propose permanent protection of *critical areas* and their *buffers* on the owner's property by use of tracts, easements, gifting of the property to the City, or by *transfer of development rights*. Any required forms or documents related to protective tracts, easements or *transfer of development rights* shall be approved by the City Attorney. Any area permanently protected under this section shall impose upon all present and future owners and occupiers of the protected area the obligation to leave the protective area permanently undisturbed, unless otherwise allowed by this chapter. Such obligation shall be enforceable by the City on behalf of the public. The rules for *transfer of development rights* will be prepared as part of Phase 2 of this Code. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.230 General development standards.

1. Clustering. Clustering of *structures* in areas of a *site* that are not located within *critical areas* or their *buffers* is encouraged. For purposes of this section, “clustering” means a form of development that allows a reduction in *lot area*, provided that the number of proposed *dwelling units* does not exceed the total number of *dwelling units* that could be allowed if clustering was not used. For the purposes of this section, the limitation on *lot averaging* in BMC 19.15.005.2 and 19.15.010.4 does not apply.
2. Building setback. Except in *critical aquifer recharge areas* and *seismic hazard areas*, *buildings* shall be set back from the edges of all *critical area buffers* or from the edges of all other *critical areas*, if no *buffers* are required, as required in the critical area study. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.240 Flood hazard areas - Components.

1. A *flood hazard area* consists of the following components:
 - A. *Floodplain*;
 - B. *Flood fringe*;
 - C. *Zero-rise floodway*; and
 - D. *Federal Emergency Management Agency (“FEMA”) floodway*.
2. The city of Burien shall determine the *flood hazard area* after obtaining, reviewing and utilizing *base flood elevations* and available floodway data for a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the “100-year flood.” The *base flood* is determined for existing conditions, unless a basin plan including projected flows under future developed conditions has been completed and adopted by the city of Burien, in which case these future flow projections shall be used. In areas where the *Flood insurance study for King County* includes detailed *base flood* calculations, those calculations may be used until projections of future flows are completed and approved by the city of Burien. [Ord. 394 § 1, 2003; Ord. 28 § 1(469), 1993]

19.40.250 Flood fringe - Development standards and permitted alterations.

1. Development proposals shall not reduce the effective *base flood* storage volume of the *floodplain*. Grading or other activity which would reduce the effective storage volume shall be mitigated by creating compensatory storage on the site or off the site if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time. Grading for construction of livestock manure storage facilities to control non-point source water pollution designed to the standards of and approved by the King County Conservation District is exempt from this compensatory storage requirement.
2. No *structure* shall be allowed which would be at risk due to *stream* bank destabilization including, but not limited to, that associated with channel relocation or meandering.
3. All elevated construction shall be designed and certified by a professional structural engineer licensed by the state of Washington and shall be approved by the city of Burien prior to construction.

4. Subdivisions, short subdivisions and binding site plans shall meet the following requirements:

- A. New building *lots* shall contain 5,000 square feet or more of buildable land outside the *zero-rise floodway*, and *building setback* areas shall be shown on the face of the plat to restrict permanent *structures* to this buildable area;
- B. All utilities and facilities such as sewer, gas, electrical and water systems shall be located and constructed consistent with subsections 5, 6 and 9;
- C. *Base flood* data and flood hazard notes shall be shown on the face of the recorded subdivision, short subdivision or binding site plan including, but not limited to, the *base flood elevation*, required *flood protection elevations* and the boundaries of the *floodplain* and the *zero-rise floodway*, if determined; and
- D. The following notice shall also be shown on the face of the recorded subdivision, short subdivision or binding site plan for all affected *lots*:
NOTICE: Lots and structures located within *flood hazard areas* may be inaccessible by emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions.

5. New residential *structures* and *substantial improvements* of existing residential *structures* shall meet the following requirements:

- A. The lowest floor shall be elevated to the *flood protection elevation*;
- B. Portions of a *structure* which are below the lowest floor area shall not be fully enclosed. The areas and rooms below the lowest floor shall be designed to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for satisfying this requirement shall meet or exceed the following requirements:
 - i. A minimum of two openings on opposite walls having a total open area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - ii. The bottom of all openings shall be no higher than one foot above grade; and
 - iii. Openings may be equipped with screens, louvers or other coverings or devices if they permit the unrestricted entry and exit of floodwaters;
- C. Materials and methods which are resistant to and minimize flood damage shall be used; and
- D. All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be floodproofed to or elevated above the *flood protection elevation*.

6. New non-residential *structures* and *substantial improvements* of existing non-residential *structures* shall meet the following requirements:

- A. The elevation requirement for residential *structures* contained in subsection 5.A. shall be met; or

B. The *structure* shall be floodproofed to the *flood protection elevation* and shall meet the following requirements:

- i. The *applicant* shall provide certification by a professional civil or structural engineer licensed by the state of Washington that the *floodproofing* methods are adequate to withstand the flood depths, pressures, velocities, impacts, uplift forces and other factors associated with the *base flood*. After construction, the engineer shall certify that the permitted work conforms with the approved plans and specifications; and
- ii. Approved building permits for floodproofed nonresidential *structures* shall contain a statement notifying *applicants* that flood insurance premiums shall be based upon rates for *structures* which are one foot below the floodproofed level;

C. Materials and methods which are resistant to and minimize flood damage shall be used; and

D. All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be floodproofed to or elevated above the *flood protection elevation*.

7. All new construction shall be anchored to prevent flotation, collapse or lateral movement of the *structure*.

8. *Mobile homes* and *mobile home parks* shall meet the following requirements:

A. *Mobile homes* shall meet all requirements for flood hazard protection for residential *structures*, shall be anchored and shall be installed using methods and practices which minimize flood damage; and

B. No permit or approval for the following shall be granted unless all *mobile homes* within the *mobile home park* meet the requirements for flood hazard protection for residential *structures*:

- i. A new *mobile home park*;
- ii. An expansion of an existing *mobile home park*; or
- iii. Any repair or reconstruction of *streets*, utilities or pads in an existing *mobile home park* which equals or exceeds 50 percent of the value of such *streets*, utilities or pads.

9. Utilities shall meet the following requirements:

A. New and replacement utilities including, but not limited to, sewage treatment facilities shall be floodproofed to or elevated above the *flood protection elevation*;

B. New on-site sewage disposal systems shall be, to the extent possible, located outside the limits of the *base flood elevation*. The installation of new on-site sewage disposal systems in the *flood fringe* may be allowed if no feasible alternative site is available;

C. Sewage and agricultural waste storage facilities shall be flood-proofed to the *flood protection elevation*;

D. Above-ground utility transmission lines, other than electric transmission lines, shall only be allowed for the transport of nonhazardous substances; and

E. Buried utility transmission lines transporting *hazardous substances* shall be buried at a minimum depth of four feet below the maximum depth of scour for the *base flood*, as predicted by a professional civil engineer licensed by the state of Washington, and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated.

10. *Critical facilities* may be allowed within the *flood fringe* of the *floodplain*, but only when no feasible alternative *site* is available. *Critical facilities* shall be evaluated through the conditional or special use permit process. *Critical facilities* constructed within the *flood fringe* shall have the lowest floor elevated to three or more feet above the *base flood elevation*. *Floodproofing* and sealing measures shall be taken to ensure that *hazardous substances* will not be displaced by or released into floodwaters. Access routes elevated to or above the *base flood elevation* shall be provided to all *critical facilities* from the nearest maintained public *street* or roadway.

11. Prior to approving any permit for alterations in the *flood fringe*, the city of Burien shall determine that all permits required by state or federal law have been obtained. [Ord. 394 § 1, 2003; Ord. 28 § 1(470), 1993]

19.40.260 Zero-rise floodway - Development standards and permitted alterations.

1. The requirements which apply to the *flood fringe* shall also apply to the *zero-rise floodway*. The more restrictive requirements shall apply where there is a conflict.

2. A development proposal including, but not limited to, new or reconstructed *structures* shall not cause any increase in the *base flood elevation* unless the following requirements are met:

A. Amendments to the *Flood insurance rate map* are adopted by FEMA, in accordance with 44 CFR 70, to incorporate the increase in the *base flood elevation*; and

B. Appropriate legal documents are prepared in which all property owners affected by the increased flood elevations consent to the impacts on their property. These documents shall be filed with the title of record for the affected properties.

3. The following are presumed to produce no increase in *base flood elevation* and shall not require a special study to establish this fact:

A. New residential *structures* outside the *FEMA floodway* on *lots* in existence before November 27, 1990, which contain less than 5,000 square feet of buildable land outside the *zero-rise floodway* and which have a total *building* footprint of all proposed *structures* on the *lot* of less than 2,000 square feet;

B. *Substantial improvements* of existing residential *structures* in the *zero-rise floodway*, but outside the *FEMA floodway*, where the footprint is not increased; or

C. *Substantial improvements* of existing residential *structures* meeting the requirements for new residential *structures* in BMC 19.40.250.

4. Post or piling construction techniques which permit water flow beneath a *structure* shall be used.

5. All temporary *structures* or substances hazardous to public health, safety and welfare, except for *hazardous household substances* or consumer products containing *hazardous substances*, shall be removed from the *zero-rise floodway* during the flood season from September 30th to May 1st.

6. New residential or nonresidential *structures* shall meet the following requirements:

A. The *structures* shall be outside the *FEMA floodway*; and

B. The *structures* shall be on lots in existence before November 27, 1990, which contain less than 5,000 square feet of buildable land outside the *zero-rise floodway*.

7. Utilities may be allowed within the *zero-rise floodway* if the city of Burien determines that no feasible alternative *site* is available, subject to the following requirements:

A. Installation of new on-site sewage disposal systems shall be prohibited unless a waiver is granted by the Seattle/King County department of public health; and

B. Construction of sewage treatment facilities shall be prohibited.

8. *Critical facilities* shall not be allowed within the *zero-rise floodway* except as provided in subsection 10.

9. Livestock manure storage facilities and associated nonpoint source water pollution facilities designed, constructed and maintained to the standards of and approved in a conservation plan by the King County Conservation District may be allowed if the city of Burien reviews and approves the location and design of the facilities.

10. *Structures* and installations which are dependent upon the floodway may be located in the floodway if the development proposal is approved by all agencies with jurisdiction. Such *structures* include, but are not limited to:

A. Dams or diversions for water supply, flood control, hydroelectric production, irrigation or fisheries *enhancement*;

B. Flood damage reduction facilities, such as levees and pumping stations;

C. *Stream* bank stabilization *structures* where no feasible alternative exists for protecting public or private property;

D. Storm water conveyance facilities subject to the development standards for *streams* and *wetlands* and the Surface Water Design Manual;

E. Boat launches and related recreation structures;

F. Bridge piers and abutments; and

G. Other fisheries *enhancement* or *stream* restoration projects. [Ord. 394 § 1, 2003; Ord. 28 § 1(471), 1993]

19.40.270 FEMA floodway - Development standards and permitted alterations.

1. The requirements which apply to the *zero-rise floodway* shall also apply to the *FEMA floodway*. The more restrictive requirements shall apply where there is a conflict.
2. A development proposal including, but not limited to, new or reconstructed *structures* shall not cause any increase in the *base flood elevation*.
3. New residential or nonresidential *structures* are prohibited within the *FEMA floodway*.
4. *Substantial improvements* of existing residential *structures* in the *FEMA floodway*, meeting the requirements of WAC 173-158-070, as amended, are presumed to produce no increase in *base flood elevation* and shall not require a special study to establish this fact. [Ord. 394 § 1, 2003; Ord. 28 § 1(472), 1993]

19.40.280 Flood hazard areas - Certification by engineer or surveyor.

1. For all new *structures* or *substantial improvements* in a *flood hazard area*, the *applicant* shall provide certification by a professional civil engineer or land surveyor licensed by the state of Washington of:
 - A. The actual as-built elevation of the lowest floor, including basement; and
 - B. The actual as-built elevation to which the *structure* is floodproofed, if applicable.
2. The engineer or surveyor shall indicate if the *structure* has a basement.
3. The city of Burien shall maintain the certifications required by this section for public inspection. [Ord. 394 § 1, 2003; Ord. 28 § 1(473), 1993]

19.40.290 Geologically hazardous areas - Development standards and permitted alterations.

1. Intent. *Geologically hazardous areas* are a potential threat to public health, safety and welfare when construction of geotechnically incompatible uses is allowed. Some potential risk due to construction in *geologically hazardous areas* can be reduced through engineering design. *Alteration* of and construction in *geologically hazardous areas* should be avoided when the potential risk to public health and safety cannot be reduced to a level comparable to the undeveloped *site*.
2. Standards—Seismic hazard areas. Development in *seismic hazard areas* shall be in accordance with the standards for earthquake design and seismic motion of the City of Burien *Construction Code*.
3. Standards--Erosion hazard areas and landslide hazard areas. Development on or within 50 feet of areas designated *erosion hazard areas* or *landslide hazard areas* shall comply with the following requirements:
 - A. Buffer. A minimum 50 foot wide *buffer* shall be established from all edges of a *landslide hazard area*. The *buffer* shall be extended as required to mitigate hazards identified in the critical area study or as otherwise necessary to protect the public health, safety and welfare. The *buffer* shall be maintained in *native vegetation* to provide additional soil stability and *erosion*

control. If the *buffer* area has been previously cleared, it shall be replanted with *native vegetation* pursuant to a landscape plan submitted by the *applicant* and approved by the *Director*.

B. Buffer reduction. As part of critical area review, the *Director* may reduce or waive the *landslide hazard area buffer* if the *applicant* shows that the following criteria are met:

- i. The proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal *site* and is consistent with the general purposes of this chapter and the public interest; and
- ii. There is no feasible alternative with less impact on the *critical area*.
- iii. For a *buffer* of between 0 feet and 25 feet, in addition to the items required in BMC 19.40.120, the critical area study must specifically discuss and support the requested *buffer* reduction, including:
 - a. The ability to maintain long-term stability of the *landslide hazard area*; and
 - b. Any appropriate mitigating measures needed to mitigate impacts of the *buffer* reduction; and
 - c. An assessment of any increased risk that could result from the *buffer* reduction.

C. Erosion control. An erosion control plan shall be submitted to the *Director* for approval prior to any *clearing, grading, construction* or other *alteration*. The *Director* may limit *clearing, grading* or filling to the period between April 1st and October 1st.

D. Disturbance and alterations. Any *alterations* permitted in or within 50 feet of an *erosion hazard area* or *landslide hazard area*, or in a required *landslide hazard area buffer*, shall comply with the following criteria:

- i. All proposed *alterations* shall be limited to the minimum necessary to accomplish the *applicant's* objectives and engineering design.
- ii. The face of cuts and fills shall be prepared and maintained to control against *erosion* and instability. Bluffs shall be protected from surface *erosion*.
- iii. The proposal shall not increase the rate of surface water runoff, *erosion* or sedimentation, shall not increase geologic hazards for any property., and shall reduce ponding and infiltration of storm drainage.
- iv. Development must be located and designed to minimize *slope* disturbance, minimize removal of vegetation, and retain open space.
- v. Shared access drives and utility corridors are required where feasible. Vehicular access shall be in the least sensitive area of the *site*.
- vi. Foundations should be tiered where possible to conform to the existing topography of the *site*. Roads, walkways, driveways and parking areas should be designed to parallel the natural contours.

vii. All development shall be designed to minimize *impervious surface coverage* and where feasible should incorporate under-structure parking and multi-level structures.

viii. Construction techniques must minimize disruption of existing topography and existing vegetation. Any disturbed vegetation shall be restored as soon as feasible.

ix. The *applicant* shall submit a detailed site plan prepared by a licensed engineer showing all proposed *clearing, grading, drainage* and utilities. The *Director* may require that all proposed *clearing, grading, drainage* and utility locations be marked in the field by a licensed land surveyor, based on the engineer-prepared site plan.

E. Landscaping. The disturbed area of a *site* shall be landscaped to provide *erosion* control and to enhance *wildlife habitat*. Landscape plantings should include trees and shrubs with a mix of shade, flowering, and coniferous and broad-leaf *evergreens* that are either native to the Puget Sound area or are valuable to western Washington birds and wildlife as listed by the Department of Fish and Wildlife. [Ord. 523 § 1, 2009]

F. Vegetation maintenance. Limited trimming and pruning of vegetation for the creation and maintenance of views is allowed in accordance with the pruning standards of the International Society of Arboriculture; provided, that the soils are not disturbed and the activity will not increase the risk of *landslide* or *erosion*.

4. Application requirements. In addition to the requirements of Section 19.40.090.3, an application for critical area review involving a *landslide hazard area* shall include at least the following additional items, submitted by the *applicant* and prepared at the *applicant's* expense. The *Director* may waive any of the following submittal requirements if not applicable to the proposal:

A. Plans and specifications prepared by a licensed architect or licensed professional engineer, in accordance with the City of Burien *Construction Code*;

B. A footing and foundation plan prepared by a licensed professional engineer incorporating the recommendations contained in the critical area study;

C. A Level 1 drainage analysis prepared by a licensed professional engineer in accordance with the Surface Water Design Manual as adopted by the City of Burien;

D. A storm water management plan prepared by a licensed professional engineer incorporating the recommendations contained in the Level 1 drainage analysis;

E. A vegetation management plan pursuant to BMC 19.40.190 showing all existing vegetation and which vegetation is proposed for removal. The location, size and *species* of all *significant trees* on the *site* shall be indicated by survey. *Significant trees* shall be retained, protected, or replaced in accordance with BMC 19.40.190. The plan shall propose *mitigation* measures to prevent *erosion* and protect the *geologically hazardous area*, its *buffer* and other properties from hazards and adverse impacts.

F. A *landslide hazard area* affidavit in a form approved by the City attorney, submitted by the *applicant*, which waives any claims against the City, releases the City from all liability, holds the City harmless, and agrees to indemnify the City for all costs, claims, and demands of any kind, including but not limited to attorney and expert witness fees associated with litigation, arbitration, or any other adversary proceeding arising in any manner from the owner's or the owner's agents' acts or omissions relating in any manner to the development. The affidavit

shall be recorded with the King County assessor's office prior to, and as an express condition of, the issuance of any grading or building permit;

G. All other applicable codes of the City are met including but not limited to the *setback*, *height*, *impervious surface coverage*, and other requirements of the this code and the requirements of the shoreline master program and the City of Burien *Construction Code*;

H. The *applicant's geotechnical engineer* or *geologist* shall review the project plans and specifications prior to issuance of any permits and provide written confirmation to the City that the recommendations and design criteria have been fully incorporated into the project documents;

I. The *applicant's geotechnical engineer* or *geologist* shall monitor project construction and provide written confirmation that the project has been constructed in accordance with their recommendations and design criteria. Changes to the recommended designs for excavation and construction which are based on new information shall be reviewed and approved by the City prior to proceeding with the development activity. [Ord. 394 § 1, 2003; Ord. 376 § 1, 2003]

19.40.300 Wetlands – Designation and Classification

1. General Requirements. *Wetlands* provide fish and *wildlife habitat*, flood storage, water quality, recreation, educational opportunities, and aesthetics. The goal of *wetland* regulations in the City of Burien is to achieve no net loss of *wetland functions and values*.

2. Applicability.

A. All *wetlands* meeting the federal definition of *wetlands* that lie within the City limits of Burien are regulated by this section.

B. Puget Sound and Lake Burien are *shorelines of the state* and shall be regulated under the Burien Shoreline Management Program.

3. Designation of Wetlands.

A. *Wetlands* are those areas in the City of Burien, designated in accordance with the Washington State Wetland Identification and Delineation Manual, as required by RCW 36.70A.175 (Ecology Publication #96-94). *Wetlands* are defined as those areas that are inundated or saturated, by ground or surface water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

B. The designation of *wetlands* through application of the protocols outlined in the Washington State Wetland Identification and Delineation Manual, regardless of any other formal identification, shall designate those *wetland* areas as *critical areas* and shall be subject to the provisions of BMC 19.40.

Where the vegetation has been removed or substantially altered, a *wetland* shall be determined by the presence or evidence of hydric or organic soil, as well as by other documentation, such as aerial photographs, of the previous existence of *wetland* vegetation.

4. Wetland Rating and Classification.

A. *Wetlands* shall be designated Category 1, 2, 3, or 4 according to the criteria in this section:

i. Category 1: *Wetlands* that meet any of the following criteria:

- a. Documented presence of fish, wildlife, or plant *species* listed by the federal or state government as endangered or threatened or outstanding actual habitat for those *species*;
- b. Equal to or greater than 10 acres in size and have three or more *wetland classes* as defined in BMC 19.10;
- c. Association with a Type 1 *stream*;
- d. Presence of plant associations of infrequent occurrence or High Quality Native *Wetland Communities*. Examples include: bogs and fens, estuarine *wetlands*, mature *forested wetlands*, or kelp and eelgrass beds; or
- e. Documented as regionally significant waterfowl or shorebird concentration areas.

ii. Category 2: *Wetlands* that do not meet any of the criteria for Category 1, but meet any of the following criteria:

- a. Greater than one acre in size;
- b. Equal to or less than one acre in size and have three or more *wetland classes* as defined in BMC 19.10;
- c. *Forested wetlands* equal to or less than one acre;
- d. Documented presence of heron rookeries or raptor nesting trees;
- e. Documented occurrences of *sensitive species* of plant, animal or fish recognized by federal or state agencies;
- f. *Associated* with Type 2 or 3 *streams*; or
- g. *Wetlands* with significant habitat value (Greater than or equal to 22 points on the Wetlands Rating Form).

iii. Category 3: A *wetland* that does not meet any of the criteria for Category 1 or 2, but meets either of the following criteria:

- a. Of a size between 1,000 square feet and one acre, with two or fewer *wetland classes* as defined in BMC 19.10;
- b. *Wetlands* where the habitat score for significant habitat value is less than or equal to 21 points;

iv. Category 4: *Wetlands associated* with Lake Burien.

- v. The following types of *wetlands* are not regulated by the City of Burien:
 - a. Category 3 *wetlands* less than 1,000 square feet and hydrologically isolated; or
 - b. Man-made ponds smaller than one acre and excavated from uplands without a surface water connection to *streams*, lakes, rivers, or other *wetlands*. [Ord. 394 § 1, 2003]

19.40.310 Wetlands – Performance standards.

1. General Requirements.

- A. Any *alterations* to a *wetland* and/or *wetland buffer* shall require mitigation as described in BMC 19.40.330.
- B. The use of *hazardous substances*, pesticides and fertilizers in the *wetland* and its *buffer* are prohibited by the City of Burien unless approved by the *Director*;
- C. Plantings in a *wetland* or *buffer* should be native to Western Washington or increase the functions of the *wetland* or *wildlife habitat*;
- D. No vegetation removal, including mowing, shall be allowed in a *wetland* or *wetland buffer* unless authorized by the *Director*. Removal of *noxious weeds* is permitted if done manually;
- E. Non-Conformance. Activities occurring in a *wetland* or *wetland buffer* prior to October 20, 2003 shall be considered a non-conforming use as described in BMC 19.55.

2. Buffers.

- A. A *buffer* area shall be established *adjacent* to designated *wetland* areas. The purpose of the *buffer* area shall be to protect the integrity, *functions*, and *values* of the *wetland* area. *Buffer* widths shall be appropriate for the sensitivity of the *wetland* and for the risks associated with land use development.
- B. The following standard *buffers* shall be established from the *wetland edge*:

Wetland Category	Standard Wetland Buffer (feet)
Category 1*	200
Category 2	100
Category 3	50
Category 4	30

* As of October 20, 2003, no Category 1 *wetlands* exist in Burien.

- C. *Wetland buffers* shall be measured from the *wetland edge* as delineated and marked in the field.
- D. Any *wetland* restored, relocated, replaced or enhanced because of a *wetland* alteration shall have the minimum *buffer* required for the highest *wetland class* involved pursuant to an approved *compensatory mitigation* plan set forth in Section 19.40.330.

E. No structures are allowed within of fifteen (15) feet of the edge of a designated or modified *wetland buffer*. This area serves to protect the *wetland* during development activities, use, and routine maintenance occurring adjacent to these resources. The following may be allowed within fifteen (15) feet of the *buffer* edge: landscaping, uncovered decks, building overhangs which do not extend more than eighteen (18) inches into the area, and driveways and patios subject to water quality regulations as adopted in the City's stormwater management regulations (BMC 13.10).

F. Increased *buffer* widths may be required by the City of Burien when:

- i. The *buffer* is within twenty-five (25) feet of the toe of a *slope* that is greater than thirty percent (30%); or
- ii. The *slope* is susceptible to *erosion* and standard *best management practices (BMP's)* and erosion-control measures will not prevent adverse impacts to the *wetland*.

G. Standard *buffer* width averaging may be allowed by the *Director* (in accordance with an approved critical area review) if:

- i. Additional protection to *wetlands* will be provided through the implementation of a *buffer enhancement* plan;
- ii. Minimum *buffer* width is the greater of fifty percent (50%) of the standard *buffer* width or twenty-five (25) feet;
- iii. *Wetland functions or values* will not be reduced; and
- iv. As long as the total area contained in the *buffer* on the development proposal *site* does not decrease.

H. *Buffer reduction* with *enhancement* may be allowed by the *Director* (in accordance with an approved critical area review) if:

- i. Additional protection to *wetlands* will be provided through the implementation of a *buffer enhancement* plan;
- ii. The existing condition of the *buffer* is degraded;
- iii. *Buffer enhancement* includes, but is not limited to the following:
 - a. Planting vegetation that would increase value for fish and *wildlife habitat*, improve water quality, or provide aesthetic/recreational value.
 - b. *Enhancement* of *wildlife habitat* by incorporating *structures* that are likely to be used by wildlife, including wood duck boxes, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.
 - c. Removing non-native plant *species* and *noxious weeds* from the *buffer* area and replanting the area subject to BMC 19.40.310.2.H.iii (a).
- iv. *Buffer* reductions under this Section shall be limited to twenty five (25)% of the standard *buffer* width or a minimum of twenty-five (25) feet, whichever is greater.

v. If the *buffer* reduction results in a *buffer* of less than twenty-five (25) feet, the *applicant* shall be responsible for attending an environmental stewardship class acceptable to the City.

I. Unless otherwise provided, the following restrictions shall apply to all development proposals in Category 1, 2, or 3 *wetlands* that include the introduction of livestock:

- i. Implementation of a plan approved by the *Director* to protect and enhance the *wetland's* water quality; and
- ii. Fencing located at the *buffer edge*. [Ord. 394 § 1, 2003]

19.40.320 Wetlands – Permitted Alterations

1. Activities and *uses* shall be prohibited from *wetlands* and *wetland buffers*, except as allowed in this section.

2. The following activities are allowed outright without completion of a critical area review as described in BMC 19.40.090:

- A. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing *wetland*.
- B. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or *alteration* of the *wetland* by changing existing topography, water conditions or water sources.
- C. *Site-specific* biological studies with the purpose of collecting data for critical area studies.
- D. Removal of *noxious weeds* if done manually.

3. Alterations to Wetlands.

- A. Activities and *uses* shall be prohibited from Category 1 *wetlands*.
- B. *Alterations* to Category 2, 3, and 4 *wetlands* may be permitted if the *Director* determines, based upon review of special studies completed by qualified professionals, that:
 - i. It will not adversely affect water quality;
 - ii. It will not adversely affect fish, wildlife, or their habitat;
 - iii. It will not have an adverse effect on drainage and/or storm water detention capabilities;
 - iv. It will not lead to unstable earth conditions or create an *erosion* hazard or contribute to scouring actions;
 - v. It will not be materially detrimental to any other property or the City as a whole; and
 - vi. It will not have adverse effects on any other *critical areas*.

4. Alterations to Wetland Buffers. No land surface *alteration* or improvement may occur in a *wetland buffer* except as provided for below:

A. *Buffer enhancements* may be allowed pursuant to an approved mitigation plan.

B. Utilities such as water, telephone, cable, electric, and natural gas may be allowed in *wetland buffers* if:

- i. The *Director* determines that no practical alternative location is available; and
- ii. The utility corridor meets any additional requirements set forth by the *Director* and BMC 19.40.070(3) including, but not limited to, requirements for installation, replacement of vegetation and maintenance pursuant to an approved mitigation plan as set forth in 19.40.330.

C. Sewer utility corridors may be allowed in *wetland buffers* only if all of the following criteria are met:

- i. The *applicant* demonstrates that sewer lines are necessary for gravity flow;
- ii. The corridor is not located in a *wetland* or *buffer* used by *species* listed as *endangered* or *threatened* by the state or federal government or containing critical or outstanding actual habitat for those *species* or heron rookeries or raptor nesting trees;
- iii. The corridor alignment including, but not limited to, any allowed maintenance roads, follows a path beyond a distance equal to 75 percent of the *buffer* width from the *wetland edge*;
- iv. Corridor construction and maintenance protects the *wetland* and *buffer* and is aligned to avoid cutting trees greater than 12 inches in diameter at breast height, when possible, and pesticides, herbicides and other *hazardous substances* are not used;
- v. An additional, contiguous and undisturbed *buffer*, equal in width to the proposed corridor including any allowed maintenance roads, is provided to protect the *wetland*;
- vi. The corridor is revegetated with appropriate vegetation native to the City at preconstruction densities or greater immediately upon completion of construction or as soon thereafter as possible, and the sewer utility ensures that such vegetation survives;
- vii. Any additional corridor access for maintenance is provided, to the extent possible, at specific points rather than by a parallel road;
- viii. The width of any necessary parallel road providing access for maintenance is as small as possible, but not greater than 15 feet, the road is maintained without the use of herbicides, pesticides or other *hazardous substances* and the location of the road is contiguous to the utility corridor on the side away from the *wetland*;
- ix. Joint use of an approved sewer utility corridor by other utilities may be allowed.

D. The following surface water management activities and facilities may be allowed in *wetland buffers* only as follows:

- i. Surface water discharge to a *wetland buffer* from a detention facility, pre-settlement pond or other surface water management activity or facility may be allowed if the discharge does not increase the rate of flow, change the plant composition in a *forested wetland* or decrease the water quality of the *wetland*;
- ii. A Category 2 *wetland* or *buffer* may be used for a regional retention/detention facility if:
 - a. A public agency and utility exception is granted pursuant to BMC 19.40.070.3;
 - b. All requirements of the Surface Water Design Manual are met; and
 - c. The use will not alter the rating or the factors used in rating the *wetland*.
- iii. A Category 3 *wetland buffer* which has as its major function the storage of water may be used as a regional retention/detention facility if a pre-settlement pond is required and all requirements of the Surface Water Design Manual are met; and
- iv. Use of a *wetland buffer* for a surface water management activity or facility, other than a retention/detention facility, such as an energy dissipater and *associated* pipes, may be allowed only if the *applicant* demonstrates, to the satisfaction of the City, that:
 - a. No practicable alternative exists; and
 - b. The functions of the *buffer* or the *wetland* are not adversely affected.

E. Public and private trails may be allowed in *wetland buffers* only if:

- i. The trail surface shall not be made of impervious materials, except that public multipurpose trails may be made of impervious materials if:
 - a) they meet all other requirements including water quality; and
 - b) an impervious trail has less of an impact on the *wetland* and its *buffer*.
- ii. The use of elevated boardwalks for trails is encouraged. [Ord. 394 § 1, 2003]

19.40.330 Wetlands - Mitigation Requirements.

1. General Requirements.

- A. All approved activities that affect regulated *wetlands* or their *buffers* require *compensatory mitigation* so that the goal of no net loss of *wetland* function or value may be achieved.
- B. Mitigation for *alterations* to *wetlands* shall achieve equivalent or greater biological functions. Mitigation plans shall be consistent with the Department of Ecology Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposal (Ecology, 1994) or other *best available science*.
- C. *Wetland* mitigation shall provide for *in-kind* lost *functions and values*. Mitigation actions shall address functions affected by the *alteration* to achieve functional equivalency or improvement, and shall provide similar *wetland* functions as those lost except when:

- i. The altered *wetland* provides minimal functions as determined by a site-specific function assessment; and
- ii. The proposed mitigation action(s) will provide equal or greater functions or will provide functions that are limited in the watershed; or
- iii. Out-of-kind replacement will best meet formally identified regional goals, such as replacement of historically diminished *wetland types*.

2. Types of Mitigation. *Applicants* shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to *wetlands* and *wetland buffers*. When an *alteration* to a *wetland* or its required *buffer* is proposed, such *alteration* shall be avoided, minimized, or compensated for in the following order of preference:

- A. Avoidance of *wetland* and *wetland buffer* impacts, whether by finding another *site* or changing the location of the proposed activity *on-site*.
- B. Minimizing *wetland* and *wetland buffer* impacts by limiting the degree of impact *on-site*.
- C. Mitigation actions that require compensation by replacing, enhancing, or substitution, shall occur in the following order of preference:
 - i. *Restoring wetlands* on upland *sites* that were formerly *wetlands*.
 - ii. *Creating wetlands* on disturbed upland *sites* such as those with vegetative cover consisting primarily of exotic introduced *species* or *noxious weeds*.
 - iii. *Enhancing* significantly degraded *wetlands*.

3. Mitigation Location. Mitigation actions shall be conducted within the same *sub-drainage basin* and on the *site* as the alteration except when all of the following apply:

- A. There are no reasonable *on-site* or in *sub-drainage basin* opportunities or *on-site* and in *sub-drainage basin* opportunities do not have a high likelihood of success due to development pressures, adjacent land uses, or *on-site buffers* or connectivity are inadequate;
- B. Off-*site* mitigation has a greater likelihood of providing equal or improved *wetland* functions than the impacted *wetland*; and
- C. Off-*site* locations shall be in the same *sub-drainage basin* and the same Water Resource Inventory Area (WRIA) unless regional or watershed goals for water quality, flood or conveyance, habitat or other *wetland* functions have been established and strongly justify location of mitigation at another site.
- D. If compensatory *wetland* or *wetland buffer* mitigation is proposed off-*site*, a signed statement of consent is required from owners of all affected properties. This statement shall be submitted to the *Director* and a Notice on Title recorded with King County Department of Assessments prior to approval of a *compensatory mitigation* plan.

4. Mitigation Timing. Mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development causing the *wetland alteration*. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora.

5. Mitigation Schedule.

- A. A mitigation *monitoring* schedule shall be established for a period of five years.
- B. An “as-built” mitigation report shall be submitted to the City within one month of mitigation installation. Acceptance of the as-built report by the City will be made after a site investigation is performed by the City, and all changes requested by the City are completed.
- C. Mitigation *monitoring* reports shall be submitted annually to the City.

6. Financial Surety. A performance bond, or other approved financial surety, is required before building and clearing and grading permits are issued. The purpose of the financial surety is to hold an *applicant* accountable for implementing the mitigation, *monitoring*, and contingency plans. The release of financial surety is contingent on satisfactory completion by the *applicant* of the proposed construction, mitigation, *monitoring*, and contingency plans as determined by the Director.

7. Mitigation ratios

- A. The following ratios shall apply to *creation* or *restoration* that meets all other requirements in Section 19.40.330.1 to .6 and is the same category of *wetland*, and has a high probability of success. The first number in the following table specifies the acreage of replacement *wetlands* and the second specifies the acreage of *wetlands* altered.

Wetland Category	Creation or Restoration Ratio
Category 1 and 2	3-to-1
Category 3 and 4	2-to-1

- B. Increased creation or restoration ratios. The City of Burien may increase the ratios under the following circumstances:

- i. Uncertainty exists as to the probable success of the proposed *restoration* or *creation*;
- ii. A significant period of time will elapse between impact and replication of *wetland* functions;
- iii. Proposed mitigation will result in a lower category *wetland* or reduced functions relative to the *wetland* being impacted; or
- iv. The impact or alteration requiring mitigation was not authorized by the City.

8. Wetlands enhancement as mitigation.

- A. Impacts to *wetlands* may be mitigated by *enhancement* of existing significantly degraded *wetlands*. *Applicants* proposing to enhance *wetlands* must produce a critical area study that identifies how *enhancement* will increase the functions of the degraded *wetland* and how this increase will adequately mitigate for the loss of *wetland* area and function at the impact *site*. An *enhancement* proposal must also show whether existing *wetland* functions will be reduced by the *enhancement* actions.

B. At a minimum, *enhancement* acreage shall be double the acreage required for *creation* or *restoration* under Subsection A.

9. Wetland and Wetland Buffer Violations. *Restoration* shall be required when a *wetland* or its *buffer* is altered in violation of law or without any specific permission or approval by the *Director*. The following minimum requirements shall be met for the *restoration* of a *wetland*:

A. The original *wetland* configuration shall be replicated including its depth, width, length and gradient at the original location;

B. The original soil type and configuration shall be replicated;

C. The *wetland edge* and *buffer* configuration shall be restored to its original condition;

D. The *wetland*, *edge* and *buffer* shall be replanted with vegetation *native* to Burien which replicates the original vegetation in *species*, sizes and densities; and

E. The original *wetland* functions shall be restored including, but not limited to, hydrologic and biologic functions.

F. Violators may be imposed penalties pursuant to BMC 8.45.

G. At the discretion of the *Director*, the violator may be required to enhance the *wetland* or *wetland buffer* to provide higher *functions and values* than the original *wetland* or *wetland buffer*.
[Ord. 394 § 1, 2003]

19.40.340 Streams – Designation and Classification

1. General Requirements. The goal of *stream* regulations in the City of Burien is to preserve and enhance *stream* banks and *stream* channels to their natural condition and to maintain and enhance existing fish and wildlife *species* and habitat diversity.

2. Applicability. All water bodies meeting the definition of *streams* that lie within the City of Burien are regulated by this section. *Ditches* are excluded from regulation as *streams* under this section; *ditches* and artificial drainage features with documented current fish usage are regulated as *streams*.

3. Stream Classifications. *Streams* shall be classified as Type 1, Type 2, Type 3, or Type 4 according to the criteria in this section.

i. Type 1: *Streams* inventoried as “*Shorelines of the State*” under Chapter 90.58 (RCW).

ii. Type 2: *Streams* that are natural *streams* that have *perennial* (year round) or *intermittent* flow and have documented use by *salmonids*.

iii. Type 3: *Streams* that are natural *streams* that have *perennial* flow and are not used by *salmonids*.

iv. Type 4: *Streams* that are natural *streams* with *perennial* or *intermittent* flows that are not used by fish. [Ord. 394 § 1, 2003]

19.40.350 Streams – Performance Standards.

1. General Requirements.

- A. Any *alterations* to a *stream* may require state and federal approvals that may require mitigation and conditions of approval beyond those required by the City.
- B. The use of *hazardous substances*, pesticides and fertilizers in the *stream* corridor and its *buffer* are prohibited by the City of Burien unless approved by the City.
- C. Plantings in a *wetland* or *buffer* should be native to Western Washington or increase the functions of the *wetland* or *wildlife habitat*;
- D. No vegetation removal, including mowing, shall be allowed in a *stream buffer* unless authorized by the *Director*. Removal of *noxious weeds* is permitted if done manually.
- E. Non-Conformance. Activities occurring in a *stream* or *stream buffer* prior to October 20, 2003 shall be considered a non-conforming use as described in BMC 19.55.

2. Buffers.

- A. A *stream buffer* area shall be established for all development proposals and activities on a site containing a *stream*. The purpose of the *buffer* shall be to protect the integrity, function, and value of the *stream*.
- B. Required *buffer* widths shall reflect the sensitivity of the particular *stream*. The following minimum *buffers* for *streams* shall be established from the *ordinary high water mark* of the adjacent *stream(s)* or from the top of the defined *stream* bank if the *ordinary high water mark* cannot be identified:

Stream Type	Standard Stream Buffer (feet)
Type 1*	125
Type 2	100
Type 3	50
Type 4	25

* as of October 20, 2003, no Type 1 *streams* exist in Burien

- C. Any *stream* *restored* or *enhanced* because of a *stream* *alteration* shall have the minimum *buffer* required for the highest *stream* class involved pursuant to an approved *mitigation* plan and *stream* study set forth in Section 19.40.370.
- D. No *impervious surfaces* are allowed within of fifteen (15) feet of the edge of a designated or modified *stream buffer*. This area serves to protect the *stream* during development activities, use, and routine maintenance occurring adjacent to these resources. The following *impervious surfaces* may be allowed within fifteen (15) feet of the *buffer* edge: building overhangs which do not extend more than eighteen (18) inches into the area, and residential driveways and patios subject to water quality regulations as adopted in the City's stormwater management regulations (BMC 13.10).

E. Increased *stream buffer* widths may be required by the City of Burien when the *slope* is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the *stream*.

F. Any *stream* with an ordinary high water mark within twenty-five (25) feet of the toe of a *slope* thirty percent (30%) or steeper, shall have the minimum *buffer* required for the *stream* class involved or a twenty-five (25) foot *buffer* beyond the top of the *slope*, whichever is greater.

G. Standard *buffer* width averaging may be allowed by the *Director* (in accordance with an approved *critical area* review) if:

- i. Additional protection to the *stream* and *riparian habitat* area will be provided through the implementation of a *buffer enhancement* plan as described in BMC 19.40.350.2 (H);
- ii. Minimum *buffer* width is the greater of fifty percent (50%) of the standard *buffer* width or twenty-five (25) feet;
- iii. *Stream* and *riparian functions or values* will not be reduced; and
- iv. As long as the total area contained in the *buffer* on the development proposal *site* does not decrease.

H. *Buffer reduction with enhancement* may be allowed by the *Director* (in accordance with an approved critical area study) if:

- i. Additional protection to *streams* will be provided through the implementation of a *buffer enhancement* plan.
- ii. The existing condition of the *buffer* is degraded.
- iii. *Buffer enhancement* includes, but is not limited to the following:
 - a. Planting *vegetation* that would increase value for fish and *wildlife habitat*, improve water quality, or provide aesthetic/recreational value.
 - b. *Enhancement* of *wildlife habitat* by incorporating *structures* that are likely to be used by wildlife, including wood duck boxes, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.
 - c. Removing non-native plant *species* from the *buffer* area.
- iv. *Buffer* reductions under this Section shall be limited to twenty five (25)% of the standard *buffer* width or a minimum of twenty-five (25) feet, whichever is greater.
- v. If the *buffer* reduction results in a *buffer* of less than twenty-five (25) feet, the *applicant* shall be responsible for attending an environmental stewardship class acceptable to the City.

I. Unless otherwise provided, the following restrictions shall apply to all development proposals within the vicinity of all City of Burien *streams* and *stream buffers* that include the introduction of livestock:

- i. Implementation of a plan approved by the *Director* to protect and *enhance* the *stream's* water quality; and
- ii. Fencing located at the *stream buffer* edge. [Ord. 394 § 1, 2003]

19.40.360 Streams – Permitted Alterations

1. Alteration to Streams.

- A. Relocation or piping of any Type 1 or 2 *stream* in the City of Burien shall not be permitted unless undertaken for *stream enhancement* as described in BMC 19.40.360.1 (B). Relocation or piping of Type 3 or 4 *streams* may take place only when it is part of an approved *mitigation* or *restoration* plan, and will result in equal or better habitat and water quality, and will not diminish the flow capacity of the *stream*.
- B. *Stream enhancement* not associated with any other development proposal may be allowed if:
 - i. An approved design, implementation, maintenance, and monitoring plan prepared by a civil engineer and a qualified professional is approved by the *Director*;
 - ii. The plan is carried out under the direct supervision of a qualified professional pursuant to provisions contained in administrative rules;
 - iii. The *enhancement* is accomplished by a public agency with a mandate to do such work;
 - iv. The *enhancement* is limited to placement of rock weirs, log controls, spawning gravel, other specific *salmonid* improvements, and involves only *light equipment* or hand labor; and
 - v. Water quality in the *stream* is protected during construction.
- C. A *stream* channel may be stabilized if:
 - i. Movement of the *stream* channel threatens existing residential or commercial *structures*, public facilities or improvements, unique natural resources or the only existing access to property; and
 - ii. The stabilization is done in compliance with the requirements of BMC 19.40.240 through 19.40.280.

2. Alterations to Stream Buffers. No *alteration* may occur in a *stream buffer* except as permitted below:

- A. *Buffer enhancements* may be allowed pursuant to an approved *mitigation* plan as described in BMC 19.40.370.
- B. *Buffers* and vegetation within the *buffer* shall be protected during construction by placement of a temporary fencing, on-site notice for construction crews of the presence of the *stream*, and implementation of appropriate erosion and sedimentation controls.
- C. Utilities such as water, telephone, cable, electric, and natural gas may be allowed in Type 3 or Type 4 *stream buffers* if:

- i. The *Director* determines that no practical alternative location is available; and
- ii. The utility corridor meets any additional requirements set forth by the *Director* and BMC 19.40.070(3) including, but not limited to, requirements for installation, replacement of vegetation and maintenance.

D. Sewer utility corridors may be allowed in *stream buffers* only if all of the following criteria are met:

- i. The *applicant* demonstrates that sewer lines are necessary for gravity flow;
- ii. The corridor is not located in a *stream* or *stream buffer* used by *species* listed as *endangered* or *threatened* by the state or federal government or containing critical or outstanding actual habitat for those *species* or heron rookeries or raptor nesting trees;
- iii. The corridor alignment including, but not limited to, any allowed maintenance roads, follows a path beyond a distance equal to seventy-five percent (75%) of the *stream buffer* width from the *ordinary high water mark*;
- iv. Corridor construction and maintenance protects the *stream* and *stream buffer* and is aligned to avoid cutting trees greater than twelve (12) inches in diameter at breast height, when possible, and pesticides, herbicides, and other *hazardous substances* are not used;
- v. An additional, contiguous and undisturbed *buffer*, equal in width to the proposed corridor including any allowed maintenance roads, is provided to protect the *stream*;
- vi. The corridor is revegetated with appropriate vegetation *native* to the City at preconstruction densities or greater immediately upon completion of construction or as soon thereafter as possible, and the sewer utility ensures that such vegetation survives;
- vii. Any additional corridor access for maintenance is provided, to the extent possible, at specific points rather than by a parallel road; and
- viii. The width of any necessary parallel road providing access for maintenance is as small as possible, but not greater than fifteen (15) feet, the road is maintained without the use of herbicides, pesticides or other *hazardous substances* and the location of the road is contiguous to the utility corridor on the side away from the *stream*.
- ix. Joint use of an approved sewer utility corridor by other utilities may be allowed.

E. The following surface water management activities and facilities may be allowed in Type 3 and Type 4 *stream buffers* only as follows:

- i. Surface water discharge to a Type 3 or Type 4 *stream* from a detention facility, pre-settlement pond or other surface water management activity or facility may be allowed if discharge does not increase the rate of flow, change the *fish habitat* or decrease the water quality of the *stream*;
- ii. A Type 3 or Type 4 *stream* or *stream buffer* may be used for a regional retention/detention facility if:

- a. A public agency and utility exception is granted pursuant to BMC 19.40.070.3;
 - b. All requirements of the King County Surface Water Design Manual, as adopted in BMC 13.10, are met;
 - c. The use will not alter the rating or the factors used in rating the *stream*; and
 - d. There are no significant adverse impacts to the *stream*.
- F. Public and private trails may be allowed in *stream buffers* only if:
- i. The trail surface shall not be made of impervious materials, except that public multipurpose trails may be made of impervious materials if:
 - a) they meet all other requirements including water quality, and
 - b) an impervious trail has less of an impact on the *wetland* and its *buffer*.
 - ii. The use of elevated boardwalks for trails is encouraged.
- G. *Stream* crossings may be allowed and may encroach on the required *stream buffer* if the following conditions are met. *Stream* crossings include those for *streets*, *trails*, or private *vehicular access easements*.
- i. There is no other feasible access to the property;
 - ii. All crossings use bridges or other construction techniques which do not disturb the *stream* bed or bank, except that bottomless culverts, fish friendly culverts or other appropriate methods demonstrated to provide fisheries protection may be used for Type 2, 3, or 4 *streams* if the culvert design is in accordance with the WDFW manual *Fish Passage Design at Road Culverts*;
 - iii. All crossings are constructed during low *stream* flow periods and are timed to avoid *stream* disturbance during periods when use is critical to *salmonids*, construction timing must coincide with the WDFW in-water work windows;
 - iv. Crossings do not occur over *salmonid* spawning areas;
 - v. Bridge piers or abutments are not placed within the *FEMA floodway* or the *ordinary high water mark*;
 - vi. Crossings do not diminish the flood-carrying capacity of the *stream*;
 - vii. Underground utility crossings are laterally drilled and located at a depth of four (4) feet below the maximum depth of scour for the *base flood* predicted by a civil engineer licensed by the State of Washington; and
 - viii. Crossings are minimized and serve multiple purposes and properties whenever possible. [Ord. 394 § 1, 2003]

19.40.370 Streams – Mitigation requirements.

1. General Requirements.

A. All impacts to *streams* that degrade the *functions and values* of the *stream* shall be avoided. If alteration to the *stream* is unavoidable, all adverse impacts to the *stream* and its *buffer* resulting from a development proposal or *alteration* shall be mitigated in accordance with an approved *mitigation* plan as described below.

B. *Restoration or mitigation* shall be required when a *stream* or its *buffer* is altered in violation of law or without any specific permission or approval by the *Director*. A *mitigation* plan shall demonstrate that:

- i. The *stream* has been degraded and will not be further degraded by the *mitigation* activity;
- ii. The *mitigation* will improve the water quality and fish and *wildlife habitat* of the *stream*;
- iii. The *mitigation* will have no lasting significant adverse impact on any *stream functions*; and
- iv. The *mitigation* will assist in stabilizing the *stream* channel.

C. *Mitigation* minimum requirements shall include:

- i. All work shall be carried out under the direct supervision of a *qualified professional*;
- ii. *Engineering* analysis as described in BMC 13.10 shall be performed to determine hydrologic conditions;
- iii. The natural channel dimensions shall be replicated including its depth, width, length and gradient at the original location, and the original horizontal alignment (meander lengths) shall be replaced;
- iv. The bottom shall be restored with identical or similar materials;
- v. The bank and *buffer* configuration shall be restored to its original condition;
- vi. The channel, bank and *buffer* areas shall be replanted with vegetation *native* to Western Washington which replicates the original vegetation in *species*, sizes and densities; and
- vii. The original biologic functions of the *stream* shall be recreated.

2. Mitigation Location. *Mitigation* of adverse impacts to *riparian habitat* areas or *streams* shall result in equivalent *functions and values* on a per function basis, be located as near the *alteration* as feasible, and be located in the same sub drainage basin as the habitat impacted.

3. Mitigation Schedule.

A. A *mitigation monitoring* schedule shall be established for a period of five (5) years.

B. An “as-built” *mitigation* report shall be submitted to the City within one (1) month of *mitigation* installation. Acceptance of the as-built report by the City will be made after a site investigation is performed by the City, and all changes requested by the City are completed.

C. *Mitigation* monitoring reports shall be submitted annually to the City and shall show that the mitigated area is meeting performance standards and goals set forth in the *mitigation* plan.

4. Financial Surety. A performance bond, or other approved financial surety, is required before building and *clearing* and grading permits are issued. The purpose of the financial surety is to hold an applicant accountable for implementing the *mitigation*, monitoring, and contingency plans. The release of financial surety is contingent on satisfactory completion by the applicant of the proposed construction, *mitigation*, *monitoring*, and contingency plans as determined by the Director. [Ord. 394 § 1, 2003]

19.40.380 Fish and Wildlife Habitat Conservation Areas –Designation and Classification

1. Fish and wildlife habitat conservation areas are those habitat areas that meet any of the following criteria:

- A. Areas with which endangered, threatened, and sensitive *species* listed by the federal government or the State of Washington have a primary association;
- B. All public and private tidelands or bedlands suitable for commercial or recreational shellfish harvest;
- C. Kelp and eel-grass beds identified by the Washington Department of Natural Resources;
- D. Herring and smelt spawning areas as outlined in Chapter 220-110 WAC and the Puget Sound Environmental Atlas as presently constituted or as may be subsequently amended;
- E. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or *wildlife habitat*;
- F. Bald eagle habitat protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292); or
- G. Heron rookeries or active nesting trees.

2. The approximate location and extent of known fish and wildlife habitat conservation areas are shown on the critical area maps adopted by the City, as most recently updated. The following maps are to be used as a guide for the City, but do not provide a final critical area designation:

- A. Washington State Department of Fish and Wildlife Priority Habitat and Species Maps;
- B. Anadromous and resident *salmonid* distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission; and
- C. Washington State Digital Coastal Atlas and Coastal Zone Management Program. [Ord. 394 § 1, 2003]

19.40.390 Fish and Wildlife Habitat Conservation Areas Performance Standards

1. The *Director* shall require the establishment of *buffer* areas for activities in, or adjacent to, fish and wildlife habitat conservation areas, when needed to protect fish and wildlife habitat conservation areas. *Buffers* shall:

- A. Consist of an undisturbed area of *native vegetation*, or areas identified for restoration, established to protect the integrity, *functions and values* of the affected habitat;
- B. Reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted on the *site* and on adjacent *sites*; and
- C. Be consistent with the management recommendations issued by the state Department of Fish and Wildlife.

2. When a *species* is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger *buffers* may be required and activities may be further restricted during the specified season.

3. A Habitat Management Plan may be required by the *Director* when the critical area review of a development proposal determines that the proposed activity will have an affect on habitat conservation areas.

A. All Habitat Management Plans shall be prepared by a qualified professional in consultation with the state Department of Fish and Wildlife. Habitat Management Plans for critical *species* listed as endangered or threatened shall be approved by the City following review and approval by the Department of Fish and Wildlife.

B. Habitat Management Plan Content Requirements. Based on the characteristics of the site and information submitted by the applicant, the Director may require that all or a portion of the following be included in a Habitat Management Plan:

- i. A map drawn to scale or survey showing the following information:
 - a. All lakes, ponds, *streams*, and *wetlands* on, or adjacent to the subject property, including the name (if named), ordinary high water mark of each, and the *stream* type or *wetland* class;
 - b. The location and description of the fish and wildlife habitat conservation areas on the subject property, as well as any potential fish and wildlife habitat conservation areas within 200 feet of the subject property as shown on the City's adopted critical area maps; and
 - c. The location of any observed evidence of use by a listed *species*.
- ii. An analysis of how the proposed development activities will affect the fish and wildlife habitat conservation areas and listed *species*;
- iii. The Habitat Management Plan should also address the following mitigation measures:

- a. Reduction or limitation of development activities within the fish and wildlife habitat conservation areas;
- b. Use of low impact development techniques or clustering of development on the subject property to locate *structures* in a manner that preserves and minimizes adverse effects to habitat areas;
- c. Seasonal restrictions on construction activities on the subject property;
- d. Preservation or retention of habitat and vegetation on the subject property in contiguous blocks or with connection to other habitats that have a primary association with listed *species*;
- e. Establishment of a *buffer* around the fish and wildlife habitat conservation areas;
- f. Limitation of access to the fish and wildlife habitat conservation areas and *buffer*; and
- g. The creation or restoration of habitat area for the listed *species*.

4. Non-indigenous species shall not be introduced. No plant, wildlife, or fish *species* not indigenous to the Puget Sound region shall be introduced into a fish and wildlife habitat conservation areas unless authorized by a state or federal permit or approval. [Ord. 394 § 1, 2003]

19.40.400 Fish and Wildlife Habitat Conservation Areas – Permitted Alterations

1. Fish and wildlife habitat conservation areas or their *buffers* may be *altered* only if the proposed *alteration* of the habitat or the mitigation proposed does not degrade the *functions and values* of the habitat. All new *structures* and land *alterations* shall be prohibited from habitat conservation areas except in accordance with this Chapter.

2. Approvals of activities may be conditioned. The *Director* may condition approvals of activities allowed adjacent to fish and wildlife habitat conservation areas as necessary, to minimize or mitigate any potential adverse effects. Conditions may include, but are not limited to, the following:

- A. Establishment of *buffer zones*;
- B. Preservation of vegetation with which listed *species* have a primary association;
- C. Limitation of access to the habitat area, including fencing to deter unauthorized access;
- D. Seasonal restriction of construction activities;
- E. Requirement of mitigation for activities having an effect on fish and wildlife habitat conservation areas; and
- F. Requirement of a performance bond, when necessary, to ensure completion and successful implementation of proposed mitigation (BMC 19.40.180).

3. Low impact *uses* and activities which are consistent with the purpose and function of the habitat *buffer* and do not detract from its integrity may be permitted within the *buffer* depending on

the sensitivity of the habitat area. Any impacts from these uses and activities shall be mitigated. Examples of *uses* and activities which may be permitted by the *Director* include:

- A. Pervious trails;
- B. Viewing platforms;
- C. Storm water management features such as grass-lined swales, and
- D. Utilities and utility easements.

4. Mitigation shall result in contiguous habitat. Mitigation sites shall be located to achieve contiguous *wildlife habitat* in accordance with a mitigation plan that is part of an approved habitat Management Plan to minimize the isolating effects of development on habitat areas. Mitigation of aquatic habitat must be located within the same aquatic ecosystem or watershed as the area disturbed.

5. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic functions, and in the case of *streams* shall include mitigation for adverse impacts upstream and/or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis. [Ord. 394 § 1, 2003]

19.40.410 Fish and Wildlife Habitat Conservation Areas – Specific Habitats

1. Endangered, threatened, and sensitive species habitat.

A. No *alteration* shall be allowed within a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or sensitive *species* have a primary association without Federal and State approval.

B. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or sensitive *species* have a primary association, such area shall be protected through the application of protection measures in accordance with a Habitat Management Plan prepared by a qualified professional and approved by the City.

C. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed adjacent to a verified nest territory or communal roost, a Habitat Management Plan shall be developed by a qualified professional. Activities are adjacent to bald eagle sites when they are within eight hundred (800) feet of an eagle nest, or within a quarter mile (1,320 feet) if in a shoreline foraging area. The applicant shall verify the location of eagle management areas for each proposed activity. Prior to issuance of the building permit by the City, the applicant shall provide written approval of the Habitat Management Plan by the Department of Fish and Wildlife.

2. Aquatic Habitats.

A. All activities, *uses*, and *alterations* proposed to be located in water bodies used by *salmonid* fish *species* or in areas that affect such water bodies shall give special consideration to the preservation and *enhancement* of *salmonid* habitat.

B. Filling of aquatic habitats, when authorized by the City of Burien's Shoreline Management Master Program, shall not adversely impact *salmonids* or their habitat or shall mitigate any unavoidable impacts, and shall only be allowed for a water-dependent activity. [Ord. 394 § 1, 2003]

19.40.420 Critical aquifer recharge areas – Designation and Classification

1. Purpose and Intent. The purpose of this section is to protect *critical aquifer recharge areas* from degradation or depletion resulting from new and redeveloping land use activities. Due to the potential vulnerability of *groundwater* underlying certain *aquifer* recharge areas to contamination and the importance of such *groundwater* as sources of public water supply, it is the intent of this section to safeguard *groundwater* resources by mitigating or precluding future discharges of contaminants from new development activities and redevelopment activities.

2. Applicability.

A. General. The provisions of this section shall apply to *regulated facilities* as defined in this ordinance within or adjacent to those portions of the City of Burien designated as *critical aquifer recharge areas* on the City of Burien Critical Areas Map. *Regulated facilities* are those commercial, industrial and *home occupation uses* that:

- i. Process or handle *hazardous materials* in regulated quantities; and
- ii. Treat and store regulated quantities of *hazardous materials*.

B. The City of Burien shall administer the provisions of this Chapter and shall determine appropriate mitigation measures.

3. Classification.

A. Criteria. Any *site* located within the City of Burien and within or adjacent to the boundaries of any *critical aquifer recharge area* is subject to the provisions of this Chapter.

B. Sources. The following sources were used to identify the *aquifer* recharge areas that are depicted on the Critical Areas Map.

- i. Guidance Document for the Establishment of Critical aquifer recharge area Ordinances, December 1998, Washington State Department of Ecology, Publication No. 97-30, Version 3.0, 47p.
- ii. Geologic Map of the Des Moines 7.5 Minute Quadrangle, D.B. Booth and H.H. Waldron, (2000), United States Geological Survey, Open File Report in press.
- iii. Occurrence and Quality of Ground Water in Southwestern King County, Washington, (1995), United States Geological Survey, Water Resources Investigations Report 92-4098, 69p. [Ord. 394 § 1, 2003]

19.40.430 Critical aquifer recharge areas - Performance Standards.

1. Prohibited activities and land uses - critical aquifer recharge areas. The following land *uses* and activities for new development or redevelopment shall be prohibited within or adjacent to *critical aquifer recharge areas*:

- A. Solid waste landfills;
- B. Disposal of hazardous or dangerous wastes;
- C. All underground *injection wells* as defined in Chapter 173-218 WAC;
- D. Mining
 - i. Metals and hard rock mining.
 - ii. Sand and gravel mining is prohibited from *critical aquifer recharge areas* determined to be highly susceptible or vulnerable.
- E. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
- F. Storage, processing, or disposal of radioactive substances. Facilities that store, process, or dispose of radioactive substances;
- G. Dry cleaning establishments using the solvent perchloroethylene; and
- H. Other.
 - i. Activities that would significantly reduce the recharge to *aquifers* currently or potentially used as a potable water source;
 - ii. Activities that would significantly reduce the recharge to *aquifers* that are a source of significant baseflow to a regulated *stream*;
 - iii. Activities that are not connected to an available sanitary sewer system are prohibited from *critical aquifer recharge areas* associated with sole source *aquifers*.

2. Hazardous materials questionnaire required. Applications for development or redevelopment of *regulated facilities* within the boundaries of *critical aquifer recharge areas* shall be accompanied by a completed *hazardous materials questionnaire* to determine the regulatory status of the *applicant* facility. The *Director* shall review the *hazardous materials questionnaire* to determine whether the facility is regulated under this ordinance. If it is determined that the *applicant* is a *regulated facility* that processes, handles, treats, and/or stores *hazardous substances* as defined by this ordinance, the applicant facility must submit a Critical Areas Report pursuant to this Section to the City.

3. Critical area review for critical aquifer recharge areas required.

- A. After reviewing the *hazardous materials questionnaire*, the *Director* may require a critical area review pursuant to BMC 19.40.090 through 19.40.150.
- B. Notification to adjacent water supply systems. The City of Burien shall provide written notice to the operators of neighboring water supply systems in whose *wellhead protection area*

the proposed *regulated activity* is located. The City of Burien shall consider comments received from the water system when reviewing the hydrogeologic assessment.

4. Appeal of determination.

A. The *Director's* determination that the facility is a *regulated facility* or within a *critical aquifer recharge area* may be appealed according to, and as part of the appeal procedure for the underlying permit or approval involved. The appeal must be accompanied with a hydrogeologic assessment to assess the facility's potential impact on the *aquifer*.

B. Prepared by a qualified professional. The hydrogeologic assessment should be prepared by a licensed engineer, engineering geologist, geologist, or hydrogeologist registered in the State of Washington and approved by the City of Burien.

C. Hydrogeologic assessment report. A hydrogeologic assessment shall include, but is not limited to, the following:

- i. Information sources;
- ii. Geologic setting--include well logs or borings used to characterize the area;
- iii. Background water quality;
- iv. *Groundwater* elevations;
- v. Location/depth to perched *water tables*;
- vi. Recharge potential of the proposed development *site* (permeability/transmissivity);
- vii. *Groundwater* flow direction and gradient;
- viii. Currently available data on wells located within 1,000 feet of *site*;
- ix. Currently available data on any spring within 1,000 feet of *site*;
- x. Surface water location and recharge potential;
- xi. Water source supply to *site*;
- xii. Any sampling schedules necessary;
- xiii. Discussion of the effects of the proposed project on the *groundwater* resource;
- xiv. Description of potential mitigation measures, should it be determined that the proposed project may have an adverse impact on *groundwater* resources; and
- xv. Other information as required by the City of Burien.

D. If the hydrogeologic assessment determines that the facility will have no effect on *groundwater*, the facility is exempt from the performance standards requirements in Sections 19.40.350.6.

E. If the hydrogeologic assessment determines that the facility could have an effect on the *groundwater* resource, the City shall require implementation of development standards and applicable performance standards in 19.40.350.5 and 19.40.350.6.

5. Performance standards – General requirements

A. Activities may only be permitted in a *critical aquifer recharge area* if the *applicant* can show that the proposed activity will not cause contaminants to enter the *aquifer* and that the proposed activity will not adversely effect the recharging of the *aquifer*.

B. The proposed activity must comply with the water source protection requirements and recommendations of the federal Environmental Protection Agency, and state Department of Health, and the King County Health District.

C. Storage tank permits. The City of Burien specifically regulates and authorizes permits for underground storage tanks, pursuant to the Uniform Fire Code (Article 79) and this Chapter. The Washington Department of Ecology also regulates and authorizes permits for underground storage tanks (WAC 173-360). The local Fire District regulates and authorizes permits for the removal of underground storage tanks (UFC 7902).

D. Owners and operators of facilities with existing underground storage tanks that are located within an *critical aquifer recharge area* shall comply with all release detection requirements as specified in WAC 173-360.

E. Spreading or injection of reclaimed water. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the departments of Ecology and Health.

i. Surface spreading must meet the ground water recharge criteria given in Chapter 90.46.080 RCW and Chapter 90.46.010(10).

ii. Direct injection must be in accordance with the standards developed by authority of Chapter 90.46.042 RCW.

F. Storm water treatment and control as per the King County Surface Water Design Manual.

6. Development standards for regulated facilities within critical aquifer recharge areas. The following mitigation measures, as applicable, are required for development of *regulated facilities* within a *critical aquifer recharge area*:

A. Floor drains shall not be allowed to drain to the storm water system and must be designed and installed to meet the Uniform Plumbing Code (UPC) Section 303.

B. If any roof venting carries contaminants, then the portion of the roof draining this area must go through pretreatment pursuant to UPC Section 304(b).

C. All nonresidential vehicle washing must be self contained or be discharged to a sanitary sewer system, if approved by the sewer utility, and is subject to UPC Sections 708 and 711.

D. Utilize Integrated Pest Management (IPM) practices for pest control and *Best Management Practices* (BMPs) for the use of fertilizers as described by the King County Local Hazardous Waste Management Program.

E. Facilities installing new underground tanks. All new underground storage facilities used or to be used for the underground storage of *hazardous substances* or *hazardous wastes* shall meet the requirements of WAC 173-360 and be designed and constructed so as to:

- i. Prevent releases due to corrosion or structural failure for the operational life of the tank;
- ii. Be protected against corrosion, constructed of non-corrosive material, steel clad with a non-corrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substance; and
- iii. Use material in the construction or lining of the tank which is compatible with the substance to be stored.

F. Aboveground tanks

- i. No new aboveground storage facility or part thereof shall be fabricated, constructed, installed, used, or maintained in any manner which may allow the release of a *hazardous substance* to the ground, or *groundwater* of the City of Burien within an *critical aquifer recharge area*.
- ii. For a tank that will contain a *hazardous substance*, no new aboveground tank or part thereof shall be fabricated, constructed, installed, used, or maintained without having constructed around and under it an impervious containment area enclosing or underlying the tank or part thereof.
- iii. A new aboveground tank that will contain a *hazardous substance* will require a secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks located within a *critical aquifer recharge area*. The secondary containment system or dike system must be designed and constructed to contain the material stored in the tank(s), have a capacity of at least 110 percent of the primary tank and conform to the requirements of UFC Chapter 7902.2.

G. Vehicle repair and servicing

- i. Commercial vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
- ii. No dry wells shall be allowed in *critical aquifer recharge areas* on *sites* used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the state Department of Ecology prior to commencement of the proposed activity.

H. Additional protective measures may be required if deemed necessary by the City of Burien.

I. State and federal regulations--The *uses* listed below shall be conditioned as necessary to protect *critical aquifer recharge areas* in accordance with the applicable state and federal regulations.

Statutes, Regulations, and Guidance Pertaining to
Ground Water Impacting Activities

Activity	Statute - Regulation - Guidance
Above Ground Storage Tanks	Chapter 173-303 -640 WAC
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303-182 WAC
Hazardous Waste Generator (<i>Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.</i>)	Chapter 173-303 WAC
<i>Injection wells</i>	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	Chapter 332-12-450 WAC, WAC , Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 332-18-015 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

[Ord. 394 § 1, 2003]